

REMARKS

Reconsideration of the present application in view of the foregoing amendments and the following arguments is respectfully requested.

Claims 1 and 5 have been amended and new claims 51-69 added. Claims 6-44 have been previously canceled, so claims 1-5 and 45-69 are present in this application.

Claims 1-5 and 45-46 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cripe, U.S. Patent No. 5,846,244, in view of Comparetto, U.S. Patent No. 5,147,364. It was suggested that Cripe discloses inserting a tool body into a bone; however, the device in Cripe is an oscillating saw that only enters the bone as it cuts the bone. Applicants' invention contemplates introducing the tool into the interior of the bone and then operating the tool to create the transverse cavity. The Cripe bone saw does not operate from within the interior of the bone. The apparatus in Comparetto is also a bone saw and, like Cripe, is not operated from within the bone to create a cavity.

In order to further clarify this distinction, Applicants have amended independent claim 1 to define the step of inserting the tool into a bone through an opening in the bone. The bone saws of Cripe and Comparetto are not inserted into the bone through an opening – the two devices simply begin cutting into the bone when they are activated. None of the art of record discloses a method of creating a transverse cavity in a bone in which the tool is inserted through an opening and activated within the bone. Since Cripe and Comparetto are bone saws their primary object is to remove one portion of bone from another, rather than to create a cavity in the bone. Thus, there is no motivation to modify the surgical procedure using either tool to introduce the tool through an opening in the bone to create a transverse cavity within the bone.

It is therefore believed that claim 1, as amended, is patentable over the art of record. Dependent claims 2-5 and 45-50 are also patentable because they depend from allowable claim 1. Applicants have amended claim 5 to provide clearer support for the recited "vertical axis".

With respect to claim 46, it was suggested that the Cripe patent discloses activation of the blade "by a push-pull motion" because an on-off trigger 104. It should be clear that the push-pull activation recited in Applicants' claim 46 relates to physically pushing and pulling the blade to achieve rotational motion. Nothing in Applicants' specification or in claim 46 suggests that a "push-pull motion" means simply depressing a trigger. Even with this extreme interpretation of "push-pull motion", there is no

"pulling" motion disclosed in Cripe. There is no indication in Cripe that one must pull the trigger 104 out for any reason, let alone to continue to activate the blade. Like any trigger, it must be assumed that the Cripe trigger must remain depressed to operate the device and that the trigger returns automatically once it is no longer depressed. Thus, even with this interpretation the Cripe trigger fails to show rotational motion of the blade being activated by "a push-pull motion".

Claims 47-50 were rejected under 35 U.S.C.103(a) as being unpatentable over the references as applied above, and further in view of the patent of Middleman. However, claims 47-50 are dependent from claim 1 and thus should be allowed for those reasons listed above. Moreover, claim 47, from which claims 48-50 depend, recites that the blade is defined by "a flexible element". It was suggested that Middleman discloses "flexible members" 150, 151. However, the elongate elements 150, 151 are described as being formed of a "pseudoelastic material, preferably a pseudoelastic shape memory alloy". Col. 70, lines 52-57; col. 82, lines 35-46. Middleman contemplates that the elements are initially constrained within a sheath but assume their operative shapes when extended from the sheath. There is no suggestion that the elongate elements are flexible in their operative shape. It can be appreciated that if the Middleman members 150, 151 were actually flexible they would be incapable of performing the grasping or cutting operations contemplated in that patent. Thus, Middleman fails to disclose the "flexible elements" recited in Applicants' claim 47 and this claim, along with its dependent claims, are patentable on their own merits.

Applicants have proposed new independent claims 51 and 63 which are believed to be patentable over the art of record. Claim 51 recites a method of creating a transverse cavity in a bone having a compression fracture. None of the cited art discloses any method that pertains to a compression fracture of a bone. The primary references of Cripe and Comparetto are bone saws which are intended to cut a bone into two pieces. Neither reference discloses the use of their respective bone saws in the repair of a compression fracture of a bone. Consequently, neither reference discloses the first step of method claim 51 of identifying a bone surface to be restored to its normal anatomic position in which that surface generally defines a transverse plane. Moreover, neither reference discloses or contemplates inserting a tool into the bone adjacent the surface to be restored.

Therefore, it is believed that new claim 51 is novel and non-obvious in view of the art of record. Its dependent claims 52-62 are also patentable on their own merits and due to their dependency on allowable claim 51. With specific reference to the dependent claims, none of the art discloses or contemplates: activation of the blade by "push-pull motion" (claim 56); the blade defined by a flexible

element (claim 57); an oval transverse cavity (claim 58); a group of compression fractures (claim 59); insertion of the tool through the pedicle of a vertebral body (claim 61); or selection between transpedicular and extra-pedicular approaches (claim 62).

Applicants have also introduced new claims 63-69. Independent claim 63 is similar to original claim 1, with a specifically defined sequence of the steps. In particular, new claim 63 recites that the tool is activated after insertion of the tool into the bone. Since Cripe and Comparetto are bone saws, they must be activated before contacting the bone so that they can begin cutting into the bone. There is nothing in the cited art that discloses or suggests first inserting the tool into a bone and then activating that tool, as required by Applicants' new claim 63. Thus, it is believed that claim 63 and its dependent claims 64-69 are allowable over the art of record.

Reconsideration of the present application and withdrawal of the rejection of claims 1-5 and 45-50 is solicited. Applicants also request allowance of newly added claims 51-69. This application is otherwise believed to be in condition for allowance. The Examiner is invited to contact the undersigned if there are any further issues that can be readily addressed in a telephonic interview.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael D. Beck". The signature is fluid and cursive, with the first name "Michael" and last name "Beck" being the most prominent parts.

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